

Conclusion: The true incidence of systemic inflammatory response syndrome (SIRS) is unknown. However, the occurrence of SIRS was characterized by a significantly elevated release of IL-6 and IL-8, with subsequent increase in the leukocyte count, C-reactive protein (CRP), and procalcitonin. Prognosis depends on the etiologic source of SIRS, as well as on Associated comorbidities. Strategies targeting purported triggers, early mediators and even physiological responses to inflammation have largely been unsuccessful to date. Some of the most prominent areas of research relates to the initiators and modulation of the pro-inflammatory cascade, methods of extracting pro-inflammatory cytokines and how genetic polymorphisms may influences the natural history of SIRS in patients.. However, some encouraging data exists with adsorptive strategies to attenuate the hyper-cytokinaemia Associated with SIRS. Activated Charcoal and Polymyxin B hemofiltration systems have promising features in this respect, but we look forward to the generation of more exhaustive and definitive research in the future.

Key Words: Systemic Inflammatory Response Syndrome, Cytokines, Treatment Strategies.

251. THE ROLE OF VASCULAR ENDOTHELIAL GROWTH FACTORS AND NEOVASCULARIZATION IN THE DEVELOPMENT OF RECURRENT VARICOSE VEINS AFTER SURGERY.

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Introduction: Varicose disease remains an actual pathology due to high incidence, possible complications and also damage to the quality of life. The basic treatment of varicose veins is surgical one. According to retrospective observations, about 35% of patients over 2-5 years after the surgery develop recurrent varicose veins with pathologic reflux at the sapheno-femoral junction (SFJ). Relapsed venous reflux at SFJ can lead to severe venous insufficiency and recurrent venous disease.

Materials and methods: The study included 26 patients with venous disease in the basin of great saphenous vein in both legs, taking part to class C2-C3, according to CEAP classification (Clinical-Etiology-Anatomy-Pathophysiology). To the patients with a defect in the SFJ and a great saphenous vein reflux, confirmed by Doppler Duplex scanning, was performed the crossectomy and striping in combination with mini-phlebectomy to remove the dilated veins. In all patients were performed both methods of prevention of the phenomenon of neovascularization: anatomical barrier and selective crossectomy, either on the left or right leg. Vascular endothelial growth factors (VEGF-C/VEGF-D) were determined by immunohistochemical methods through monoclonal antibodies.

Results: One month later after the surgery have been effectuated Duplex scanning to all patients, for the control of performed crossectomy, which demonstrated a lack of residual affluents. One year after the surgery in 15.2% of patients were detected visible varices at the thigh, while the phenomenon of neovascularization, confirmed by Doppler Duplex scanning, was detected in 22.9% patients. After two years the frequency of phenomenon of neovascularization was 34.5% (23% selective crossectomy and anatomical barrier-11.5%). In these patients, plasma levels of VEGF-C/VEGF-D was increased,

which confirms the role of these factors in the pathogenesis of the phenomenon of neovascularization and recurrent varicose veins.

Conclusion: In addition to surgical treatment of varicose veins, which includes various methods of prevention of the phenomenon of neovascularization (anatomical barriers, selective crosssection, endothelial inversion), antiangiogenic therapy gets a new large aspect directed towards receptors VEGFR-3 and its ligands VEGF-C/VEGF-D. They are directly involved in the process of formation of new, tortuous vessels and development of severe venous insufficiency.

Key words: Endothelial growth factors, neovascularization, varices.

252. FEATURES OF RECIPROCAL INTERACTION AS COORDINATION OF MOTOR AND CARDIAC FUNCTIONS

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Introduction: Reciprocation is the coordination of 2 activity centers. The majority of works were devoted to the reciprocal interactions of motor centers; but much less attention was given to the phenomenon of vegetative function regulation.

Aim: To study the features of reciprocal interaction of sympathetic and parasympathetic divisions of autonomic nervous system.

Materials and methodology: A group of male rats Wistar (n = 12) weighing 250-300 g was used for experiment. The first stage of the experiment was to check the heart rate during food procuring movements in normal rats (n = 8) with normal, stable motor skills. There was the phenomenon of short-term motor bradycardia during the movement. The second stage of the experiment was to register the heart rate during food procuring movement in rats influenced by an intraperitoneal atropine (1.7 mg/kg) injection, in order to exclude vagal effect on heart function.

Results: Pharmacological blockage of the vagus nerve by atropine causes a significant increase (p<0.05) in heart rate background 11% to the value of 487 ± 10.1 BPM, but not to “rule out” the phenomenon of short-term motor bradycardia during the food procuring movement.

Conclusion: The reciprocal innervation of antagonistic muscles and heart have their similarities and differences. This can have 3 levels of regulation and 2 opposing processes (excitation and inhibition) in the reciprocal organization. The working body (or an interconnected group) (lower level) gets antagonistic innervation from two centers (average level). It can predict that the presence of a higher level which causes excitation of one center and simultaneous inhibition of the antagonistic center.

Key words: Reciprocation, heart rate, rats, atropine.